4. But the *direction* of the electrical fire being different in the charging, will alſo be different in the exploſion. The bottle charged thro' the hook, will be diſcharged thro' the hook; the bottle charged thro' the coating, will be diſcharged thro' the coating, and not other ways: for the fire muſt come out the ſame way it went in.

5. To prove this; take two bottles that were equally charged thro' the hooks, one in each hand; bring their hooks near each other, and no ſpark or ſhock will follow; becauſe each hook is diſpoſed to give fire, and neither to receive it. Set one of the bottles down on glaſs, take it up by the hook, and apply its coating to the hook of the other; then there will be an exploſion and ſhock, and both bottles will be diſcharged.

6. Vary the experiment, by charging two phials equally, one thro' the hook, the other thro' the coating: hold that by the coating which was charged thro' the hook; and that by the hook which was charg'd thro' the coating: apply the hook of the firſt to the coating of the other, and there will be no ſhock or ſpark. Set that down on glaſs which you held by the hook, take it up by the coating, and bring the two hooks together: a ſpark and ſhock will follow, and both phials be diſcharged.

In this experiment the bottles are totally diſcharged, or the equilibrium within them reſtored. The *abounding* of fire in one of the hooks (or rather in the internal ſurface of one bottle) being exactly equal to the *wanting* of the other: and therefore, as each bottle has in itſelf the *abounding* as

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well as the *wanting*, the wanting and abounding muſt be equal in each bottle. See §. 8, 9, 10, 11. But if a man holds in his hands two bottles, one fully electrify'd, the other not at all, and brings their hooks together, he has but half a ſhock, and the bottles will both remain half electrified, the one being half diſcharged, and the other half charged.

7. Place two phials equally charged on a table at five or ſix inches diſtance. Let a cork-ball, ſuſpended by a ſilk thread, hang between them. If the phials were both charged through their hooks, the cork, when it has been attracted and repell'd by the one, will not be attracted, but equally repelled by the other. But if the phials were charged, the one through the hook, and the other[*] through the coating, the ball, when it is repelled from one hook, will be as ſtrongly attracted by the other, and play vigorouſly between them, 'till both phials are nearly diſcharged.

8. When we uſe the terms of *charging* and *diſcharging* the phial, 'tis in compliance with cuſtom, and for want of others more ſuitable. Since we are of opinion, that there is really no more electrical fire in the phial after what is called its *charging*, than before, nor leſs after its *diſcharging*; excepting only the ſmall ſpark that might be given to, and taken from, the non-electric matter, if ſeparated from

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[*] To charge a bottle commodiouſly through the coating, place it on a glaſs ſtand; form a communication from the prime conductor to the coating, and another from the hook to the wall or floor. When it is charged, remove the latter communication before you take hold of the bottle, otherwiſe great part of the fire will eſcape by it.

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